

REMARKS

Claims 21-44 are pending, of which Claim 21 is independent. Claims 23-27 and 29-44 are withdrawn from consideration. Claims 21, 24, and 42 are amended by the present amendment. New independent Claim 45 is added to the application by the present amendment. Claims 21, 22 and 28 stand rejected under 35 U.S.C. § 102. This rejection is respectfully traversed. For the reasons described below, these claims are in condition for allowance.

Claim Amendments

Claims 21, 24, and 42 are amended by the present amendment to claim the invention more distinctly. Withdrawn Claims 24 and 42 are amended by the present amendment to correct typographical errors. Independent Claim 21 is amended to specify that the architecture of the user applications enables changes to be made to the configuration business rules objects without custom reprogramming, by storing the configuration business rules objects separate from application code of the user applications. Support for this amendment can be found throughout the application, for example, at least at ¶ 46 of the application. Acceptance is respectfully requested.

35 U.S.C. § 102(e) Rejection

Claims 21, 22 and 28 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Guheen et al. (U.S. Patent 6,615,166). This rejection is respectfully traversed.

For explanation, but without limitation to the claims, certain embodiments will be described. With the inventive intelligent catalog system, users, such as companies (suppliers, distributors and channel partners), are provided with a total solutions product catalog system that enables a company to create a catalog of products and sub-products on-demand, which it can configure, add new products to, and update, without any custom reprogramming. The catalog system enables the company's customers to configure, design and buy a product solution, such as a network infrastructure system. A product solution, such as a network infrastructure system, often includes a substantial amount of products, options, accessories, and sub-products, all of

which need to be configured and designed into an efficient standalone system. When a customer is configuring and designing such a system, it is important to be able to determine whether all the parts are compatible with one another. The inventive catalog system stores product information according to an object model that includes configuration business rules objects. User applications (e.g. tools) provided by the inventive catalog system use these configuration business rules objects when configuring and designing a product solution for any type of product, and the product can have multiple sub-products. In this way, the catalog system can check the compatibility of the products selected by the customer and suggest products that are more efficient, that have more features, and/or that have a better fit to the selected products. The configuration business rules objects are stored separate from the application code of the user applications, and this architecture enables the company to implement changes on-demand, such as new products, to the configuration business rules objects without any custom reprogramming, repackaging or redeployment to the system.

By way of contrast, Guheen discloses a software development and quoting system that enables software programmers to build and configure customized quoting tools for companies. Guheen's software development and quoting system enables a software development team to build custom application tools for a company that allow its customers to buy internet software/hardware systems. Guheen teaches that the software development team using Guheen's software development and quoting system should create customized application tools for companies based on an object-oriented software methodology promoting reusability of software code. For example, Guheen teaches that the software development/engagement team should use Guheen's software development and quoting system to manage and reuse old code, modify the code for each client, and drop it into a new framework to address a new client or market. Each custom application tool designed by the team using Guheen's software development and quoting system would be unique in that the database repository and related software components would be developed from scratch, for each type of internet/software application to which they are directed. As such, any changes to a custom application tool designed using Guheen's system would require repackaging and redeployment.

Instead of focusing on a software development and quoting system for a team of software developers to create customized software tools, the claimed invention, set forth in Claim 21, relates to a catalog system that enables users, such as companies (suppliers or vendors), to deploy easily, without hiring a software development team to perform custom programming, a catalog system for customers to configure and design a product solution. In particular, architecture of the inventive catalog system enables a company to add easily new products, accessories and rules accessories to its catalog without any custom software programming. As set forth in Claim 21, the architecture of the user applications enables changes to be made to the configuration business rules objects without any custom reprogramming by storing the configuration business rules objects separate from application code of the user applications, and Guheen does not relate to this inventive approach.

Thus, unlike Guheen, the inventive catalog system is data driven and is designed so that the code is clearly distinguished from the data (i.e., data structure) on which it acts. In fact, Guheen teaches away from this inventive concept because Guheen's system is based on an approach that requires custom reprogramming for every release of custom application tools implemented by the system. Specifically, Guheen provides a software development and quoting system for a development team to customize (program) its existing software to address a new client or market. In fact, any tools deployed by Guheen's software development and quoting system are fixed and thus would be product specific. Guheen's software development and quoting system enables software programmers to design tools. Since Guheen is directed to a system that enables software programmers to design tools, it would be inconsistent with the teachings of Guheen to create a catalog system that does not require software programmers for implementation. As such, Guheen provides a software development and quoting tool that requires programmers to customize the software tools developed by the system, and therefore, Guheen does not relate to a catalog system that has architecture enabling users to make changes to product information without any custom reprogramming.

Moreover, Guheen's discussion of metadata relates to conventional uses and conventional applications of metadata and, therefore, does not relate to the inventive metadata

system set forth in Claim 21. Specifically, Guheen discusses that the browser should be able to process metadata and that the development team should use metadata to describe how media files are represented within the storage repository. The examples of metadata discussed by Guheen are: Media type (MPEG video, JPEG image), Media settings (sample rate, resolution, compression attributes), Usage details (which module uses the content), Media source (Source, author, creation date), and Legal information (whether the media is copyrighted).

Conversely, the claimed invention, set forth in Claim 21, requires that the inventive catalog system uses a meta data system capable of dynamic reconfiguration of user applications, where the dynamic reconfiguration of user applications occurs when new product types are added to the database. In this way, the metadata system of the inventive catalog system enables users (e.g., companies) easily to create and update catalogs specifying their products, while the related user applications in the catalog system are dynamically updated to reflect this new product information. Thus, components of the present invention are generally designed to enable companies to develop their own catalog systems on-demand without having to engage an expensive software development team to perform the programming and implementation of the system.

By way of contrast, Guheen's teachings related to metadata do not even contemplate creating a metadata system to enable the dynamic reconfiguration of user applications in response to changes to new products being added or changes to the interface. As such, Guheen does not even consider using a metadata system to support the dynamic reconfiguration of user applications.

In addition, Guheen does not relate to the inventive user applications, in communication with the database, using the object model and the metadata system, the user applications including a catalog application and a bill of materials application, as set forth in Claim 21. Although Guheen briefly in passing mentions a "catalog application," Guheen provides no implementation details or other related information. Further, Guheen does not discuss that a catalog application should use a metadata system and an object model, as set forth in Claim 21.

Moreover, Guheen does not discuss the claimed content translator, in communication with the database, converting unstructured product content into structured product content based on the object model and the meta data system, where the content translator indexes the structured product content in the database to create at least a portion of the product information. For example, Guheen does not discuss that unstructured product content is converted. In fact, Guheen says nothing about structured content (e.g., XML content). Indeed, Guheen does not discuss any product solutions using XML technology. The present invention, however, can transform a user's, e.g., supplier's content into intelligently structured content. For example, the present invention uses XML to solve the major problems associated with conventional catalogs, which can typically only be interpreted by people and not computers. Utilizing XML, the inventive metadata system, and the object model, the inventive catalog system elevates the product content of suppliers' catalogs from brochureware viewable by people, to transaction ready catalogs for eCommerce computer applications. See Application at ¶ 41. Thus, Guheen does not relate to the claimed content translator, in communication with the database, used to convert unstructured product content into structured product content based on the object model and the meta data system, where the content translator indexes the structured product content in the database to create at least a portion of the product information, as set forth in Claim 21.

As such, Guheen does not discuss the limitations set forth in Claim 21 including:

- a database repository storing information about products from one or more vendors according to an object model representing the product information, the object model including parametric objects, graphic objects, document objects, configuration business rules objects and procurement rule objects, where the object model is capable of handling an unrestricted number of objects for each product;
- the configuration business rules objects being stored according to a hierarchy by:
 - (i) storing sub-products that a product is comprised of, including storing product part replacement information;
 - (ii) storing product accessories capable of being added to a product;

(iii) storing rules for building product solutions that incorporate product information stored in the database; or

(iv) storing rules for equivalence or substitution of products for use when building a product solution;

- the database using a meta data system describing the product information, the meta data system capable of dynamic reconfiguration of user applications when new product types are added to the database;
- a content translator, in communication with the database, converting unstructured product content into structured product content based on the object model and the meta data system, where the content translator indexes the structured product content in the database to create at least a portion of the product information;
- user applications, in communication with the database, using the object model and the meta data system, the user applications including a catalog application and a bill of materials application; and
- one or more of the user applications configuring and designing a product solution based on the configuration business rules objects, where the product solution being configured and designed includes one or more products each containing one or more sub-products, where the architecture of the user applications enables changes to be made to the configuration business rules objects without any custom reprogramming by storing the configuration business rules objects separate from application code of the user applications, as set forth in Claim 21.

Therefore, it is respectfully requested that the §102 rejection of base Claim 21 and its respective dependence claims, 22 and 28, be reconsidered and withdrawn.

New Claim

New Claim 45 is added to the application by the present amendment. New Claim 45 includes limitations similar to those set forth in independent Claim 21, but further requires that the claimed catalog system include a generic scheme (e.g. XML schema), which is capable of adding new products to the product information without any custom reprogramming. Support

for this amendment can be found throughout the application, at least at ¶¶ 33, 38, 46, 65, 72, 71 and FIGS. 7 and 8. Acceptance is respectfully requested.

For the reasons described above, the requirements of new Claim 45 are not anticipated by Guheen. Further, Guheen does not discuss the generic scheme set forth in new Claim 45 that enables new products to be added to the product information without any custom reprogramming. In fact, Guheen teaches away from this inventive concept because Guheen is based on an approach that requires custom reprogramming for every release of software tools. Moreover, Guheen does not even contemplate ways to make it easier for the user (e.g., company) to implement and update its catalogs with new product categories, new rules or new product attributes without any programming because Guheen does not even relate to a generic scheme (XML or Relational). Furthermore, Guheen does not even relate to the generic scheme (e.g. relational or XML schemas) set forth in New Claim 45. Thus, Guheen does not discuss the requirements of new base Claim 45.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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